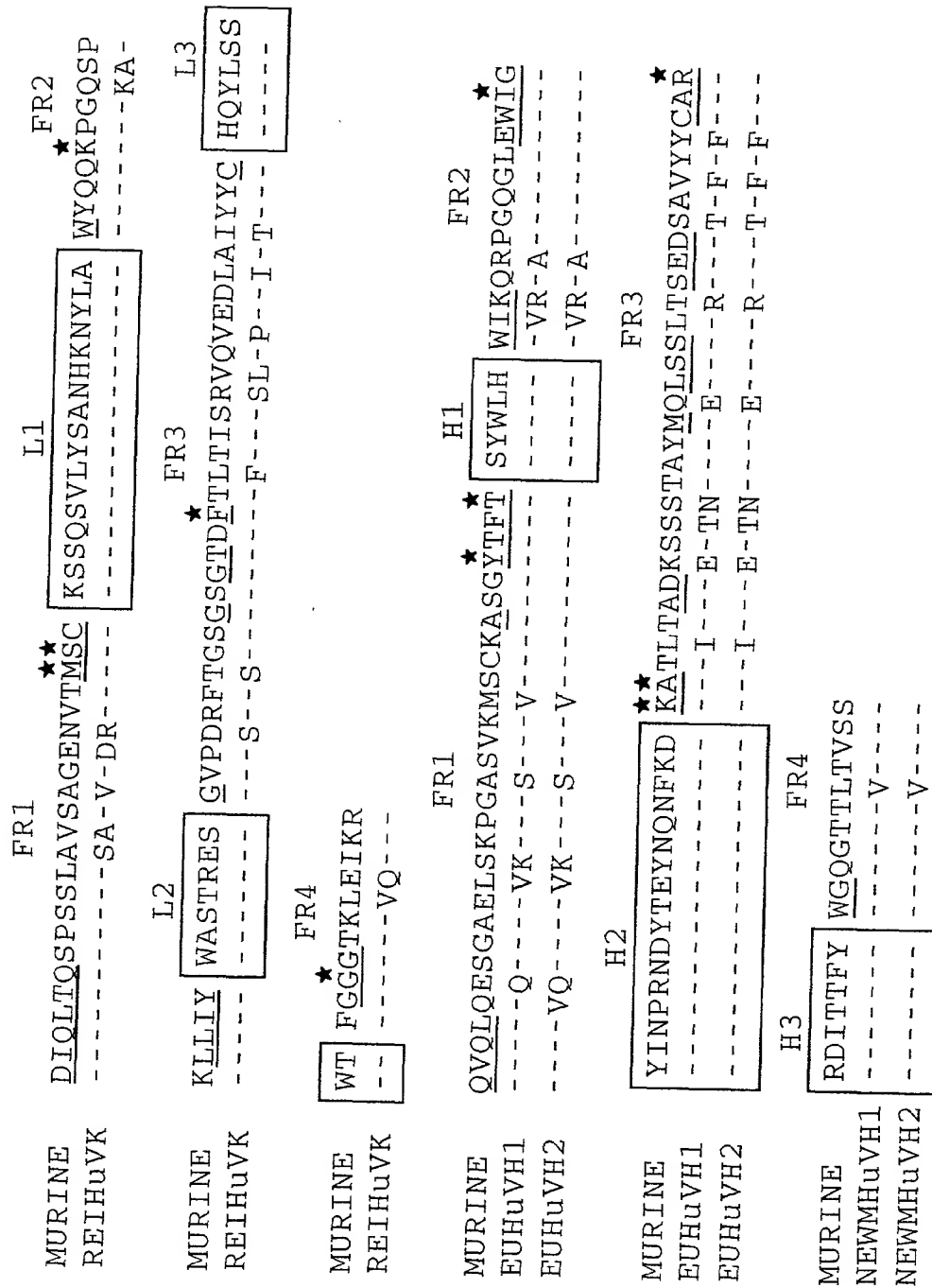


FIG. 1

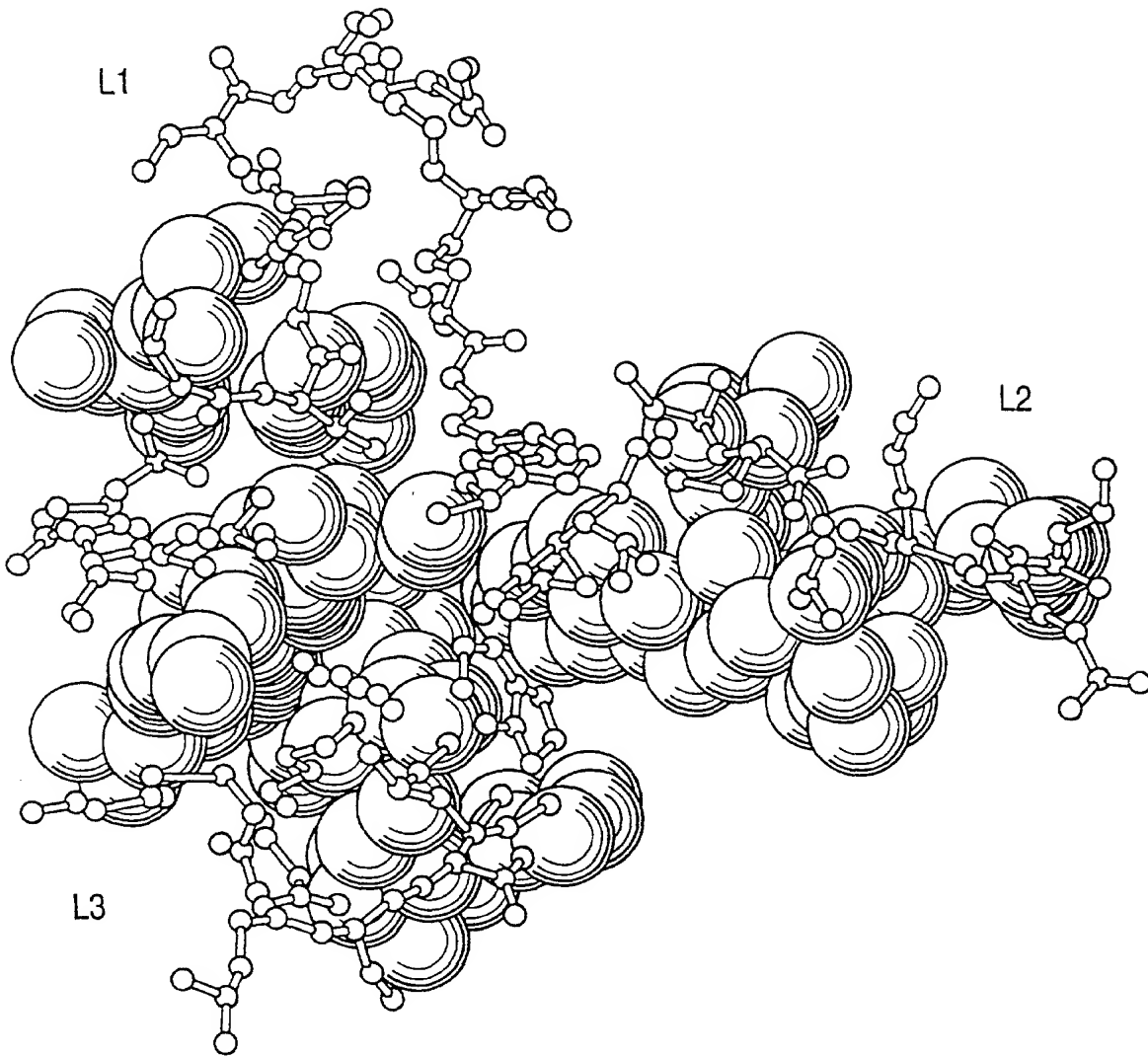


Title: IMMUNOCONJUGATES AND
HUMANIZED ANTIBODIES SPECIFIC
FOR B-CELL LYMPHOMA AND
LEUKEMIA CELLS

Inventor(s): Shui-on LEUNG et al.

Appl. No.: unassigned

FIG. 2A



Title: IMMUNOCONJUGATES AND
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Appl. No.: unassigned

FIG. 2B

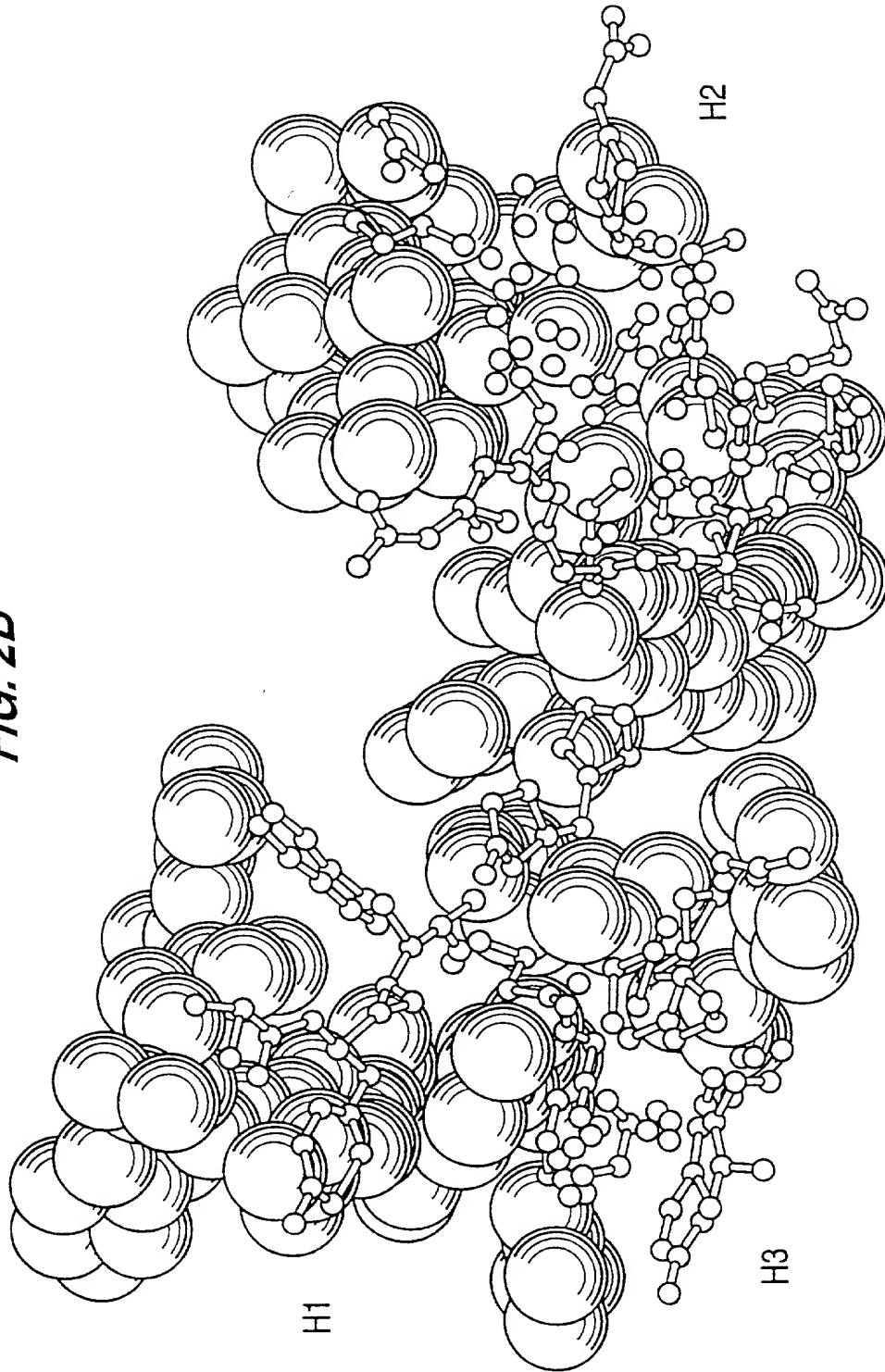


FIG. 3A

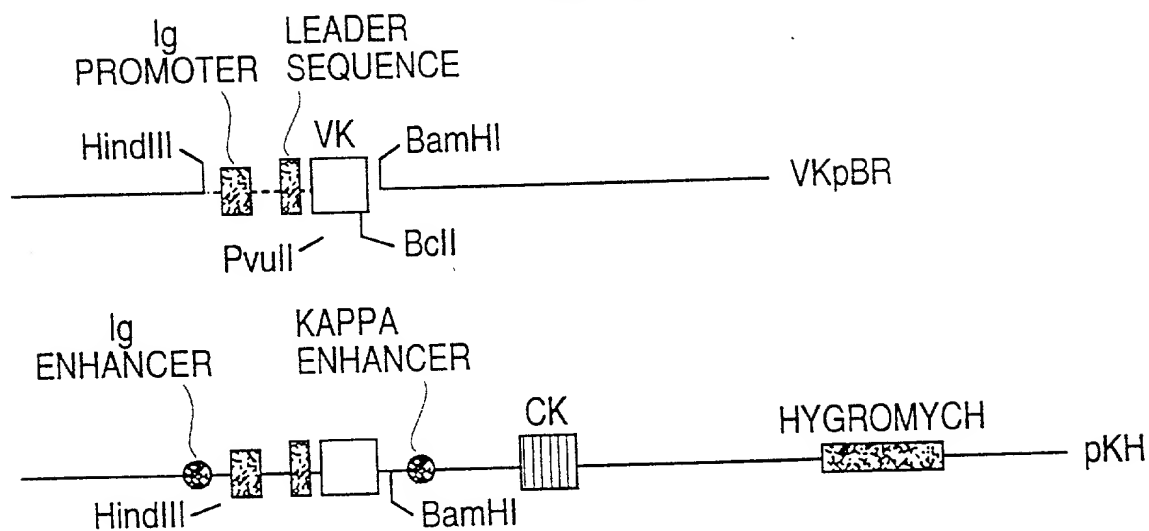


FIG. 3B

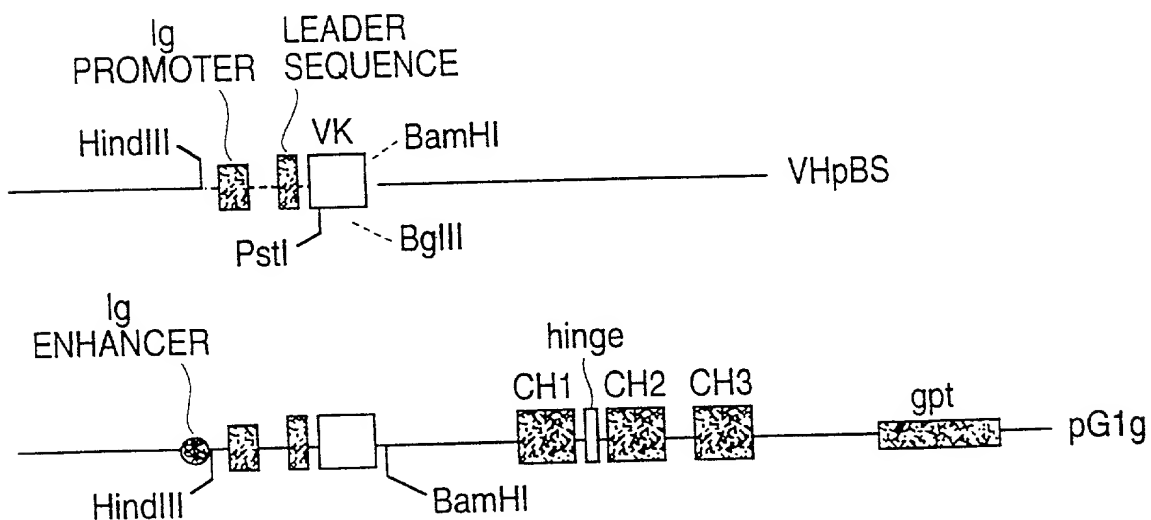


FIG. 4A

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GACATTCAGCTGACCCAGTCTCCATCATCTCTGGCTGTGTCTGCAGGAGAAAACGTCACT
1-----+-----+-----+-----+-----+-----+-----+ 60
CTGTAAGTCGACTGGGTCAGAGGTAGTAGAGACCGACACAGACGTCCTCTTTTGCAGTGA

D I Q L T Q S P S S L A V S A G E N V T -
ATGAGCTGTAAGTCCAGTCAAAGTGTTTTATACAGTGCAAAATCACAAAGAACTACTTGGCC
61-----+-----+-----+-----+-----+-----+-----+ 120
TACTCGACATTCAGGTCAGTTTCACAAAATATGTCACGTTTAGTGTTCTTGATGAACCGG

                                CDR1
M S C [K S S Q S V L Y S A N H K N Y L A] -
TGGTACCAGCAGAAACCAGGCAGTCTCCTAAACTGCTGATCTACTGGGCATCCACTAGG
121-----+-----+-----+-----+-----+-----+-----+ 180
ACCATGGTCGTCCTTTGGTCCCGTCAGAGGATTTGACGACTAGATGACCCCGTAGGTGATCC

                                CDR2
W Y Q Q K P G Q S P K L L I Y [W A S T R] -
GAATCTGGTGTCCTGATCGCTTCACAGGCAGCGGATCTGGGACAGATTTTACTCTTACC
181-----+-----+-----+-----+-----+-----+-----+ 240
CTTAGACCACAGGGACTAGCGAAGTGTCCTCGCTAGACCCCTGTCTAAATGAGAATGG

[E S] G V P D R F T G S G S G T D F T L T -
ATCAGCAGAGTACAAGTTGAAGACCTGGCAATTTATTATTGTCACCAATACCTCTCCTCG
241-----+-----+-----+-----+-----+-----+-----+ 300
TAGTCGTCTCATGTTCAACTTCTGGACCGTTAAATAACAGTGGTTATGGAGAGGAGC

                                CDR3
I S R V Q V E D L A I Y Y C [H Q Y L S S] -
TGGACGTTTCGGTGGAGGGACCAAGCTGGAGATCAAACGT
301-----+-----+-----+-----+-----+-----+-----+ 339
ACCTGCAAGCCACCTCCCTGGTTCGACCTCTAGTTTGCA

[W T] F G G G T K L E I K R -
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FIG. 4B

CAGGTCCAGCTGCAGGAGTCAGGGCTGAACTGTCAAAACCTGGGGCCCTCAGTGAAGATG + 60
1-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
GTCCAGGTCGACGTCCTCAGTCCCGACTTGACAGTTTGGACCCCGGAGTCACCTCTTAC
Q V Q L Q E S G A E L S K P G A S V K M -
TCCTGCAAGGCTTCTGGCTACACCTTTACTAGCTACTGGCTGCACCTGGATAAAACAGAGG + 120
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
61 AGGACGTTCCGAAGACCGATGTGAAATGATCGATGACCGACGTGACCTATTTGTCTCC
CDR1
S C K A S G Y T F T [S Y W L H] W I K Q R -
CCTGGACAGGCTCTGGAATGGATTGGATACATTAATCCTAGGAATGATTATCTAGTAC + 180
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
121 GGACCTGTCCCAGACCTTACCTAACCTATGTAATTAGGATCCTTACTAATAATGACTCATG
CDR2
P G Q G L E W I G Y I N P R N D Y T E Y -
AATCAGAACTTCAAGGACAAGGCCACATTGACTGCAGACAAATCCTCCAGCACAGCCTAC + 240
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
181 TTAGTCTTGAAGTTCTGTTCCTGGTGTAACCTGACGCTGTTTAGGAGGTCGTGTCGGATG
[N Q N F K D] K A T L T A D K S S T A Y -
ATGCAACTGAGCAGCCTGACATCTGAGGACTCTGCAGTCTATTACTGTGCAAGAAGGAT + 300
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
241 TACGTTGACTCGTCGGACTGTAGACTCCTGAGACGTCAGATGAATGACACGTTCTTCCCTA
M Q L S S L T S E D S A V Y Y C A R [R D] -
ATTACTACGTTCTACTGGGGCCAAGCACCACTCTCACAGTCTCCTCG + 348
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
301 TAATGATGCAAGATGACCCCGGTTCCGTGGTGAGAGTGTACAGAGGAGC
CDR3
[I T T F Y] W G Q G T T L T V S S -

[illegible]

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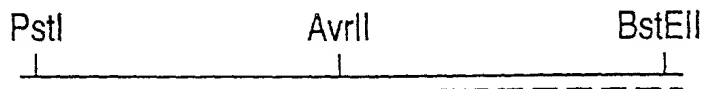
Inventor(s): Shui-on LEUNG et al.
Appl. No.: unassigned

FIG. 5B

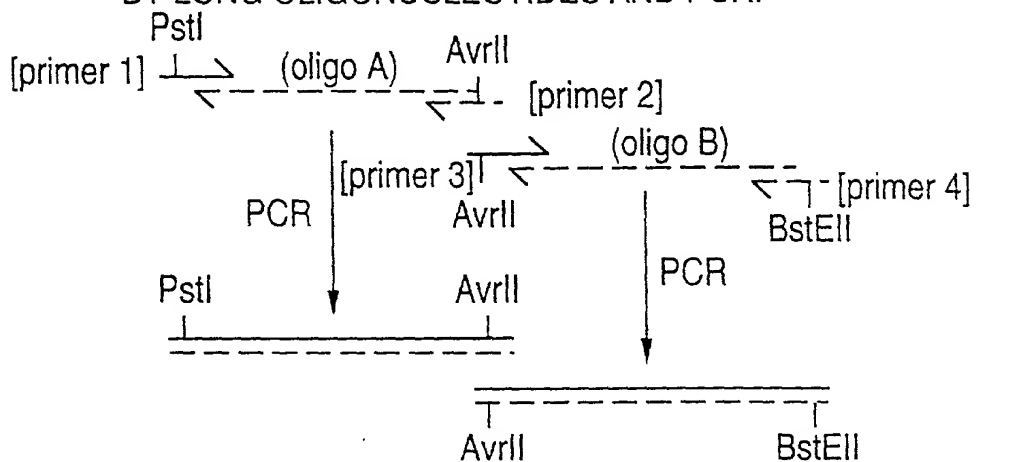
CAGGTCCAGCTGGTCCAATCAGGGGCTGAAGTCAAGAAACCTGGGTCAATCAGTGAAGTTC
 1-----+-----+-----+-----+-----+-----+-----+ 60
 GTCCAGGTCGACCAAGTTAGTCCCGACTTCAGTTCTTTGGACCCAGTAGTCACTTCCAG
 Q V Q L V Q S G A E V K K P G S S V K V -
 TCCTGCAAGGCTTCTGGCTACACCTTTACTAGCTACTGGCTGCACTGGGTGAGCAGGCA 120
 61-----+-----+-----+-----+-----+-----+-----+
 AGGACGTTCCGAAGACCGATGTGGAAATGATCGATGACCGACGTGACCCAGTCCGTCGGT
 CDR1
 S C K A S G Y T F T S Y W L H W V R Q A -
 CCTGGACAGGCTCTGGAATGGATTGGATACATAATCTAGGAATGATTATACTGAGTAC 180
 121-----+-----+-----+-----+-----+-----+-----+
 GGACCTGTCCCAGACCTTACCTAACCTATGTAATTAGGATCCTTACTAATATGACTCATG
 CDR2
 P G Q G L E W I G Y I N P R N D Y T E Y -
 AATCAGAAGTTCAGGACCAAGGCCACAATAACTGCAGACGAATCCACCAATACAGCCTAC 240
 181-----+-----+-----+-----+-----+-----+-----+
 TTAGTCTTGAAGTTCTCTGTTCCGGTGTTATTGACGCTGCTTAGGTGTTATGTCTGGATG
N Q N F K D K A T I T A D E S T N T A Y -
 ATGGAGCTGAGCAGCCTGAGGTCTGAGGACACGGCATTTTATTTTGTGCAAGAAGGAT 300
 241-----+-----+-----+-----+-----+-----+-----+
 TACCTCGACTCGTCGGACTCCAGACTCCTGTGCCGTAAATAAAACACGTTCTTCCCTA
 M E L S S L R S E D T A F Y F C A R R D -
 ATTACTAGTTCTACTGGGGCCAAAGGCACCGTCAACCGTCTCCTCG 348
 301-----+-----+-----+-----+-----+-----+-----+
 TAATGATGCAAGATGACCCCGGTTCCGTGGTGCCAGTGGCAGAGGAGC
 CDR3
I T T F Y W G Q G T T V T V S S -

FIG. 6

DESIGNED SEQUENCE FOR HUMANIZED LL2 VH DOMAIN:



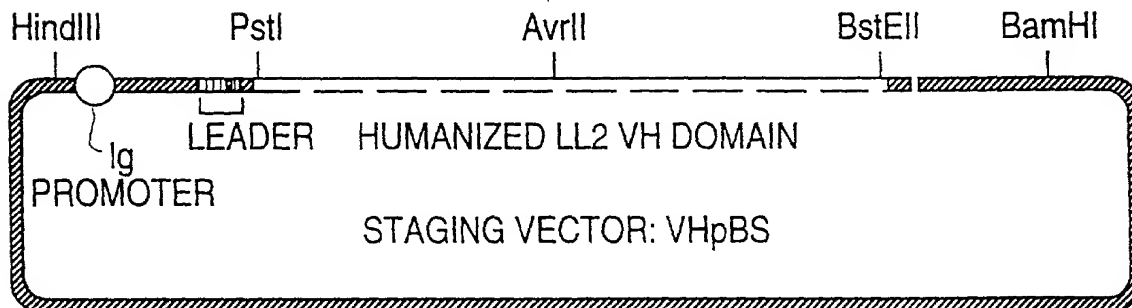
CONSTRUCTION OF THE HUMANIZED LL2 VH DOMAIN
BY LONG OLIGONUCLEOTIDES AND PCR:



PstI/AvrII DIGESTION

BstEII/AvrII DIGESTION

LIGATION TO THE PstI/BstEII
SITES OF THE HEAVY CHAIN
STAGING VECTOR: VH_{pBS}

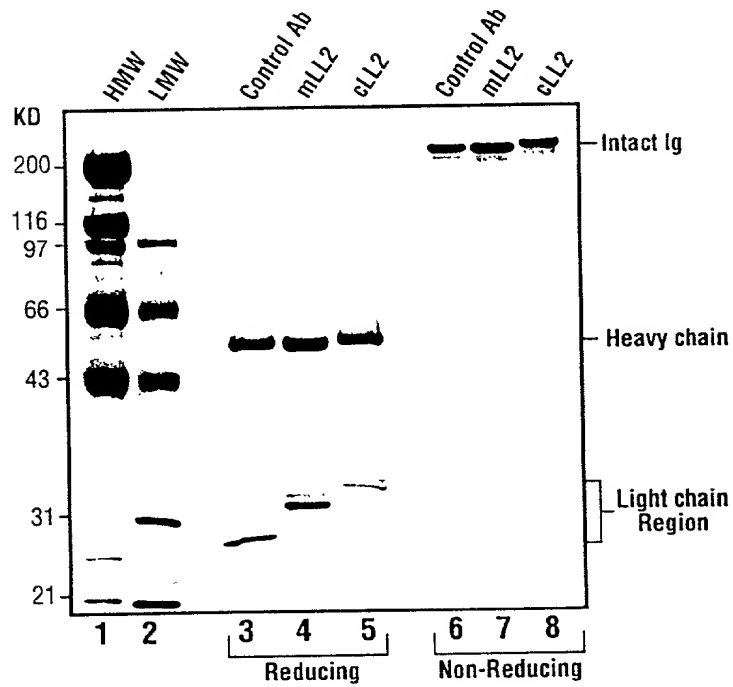


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Appl. No.: unassigned

FIG. 7



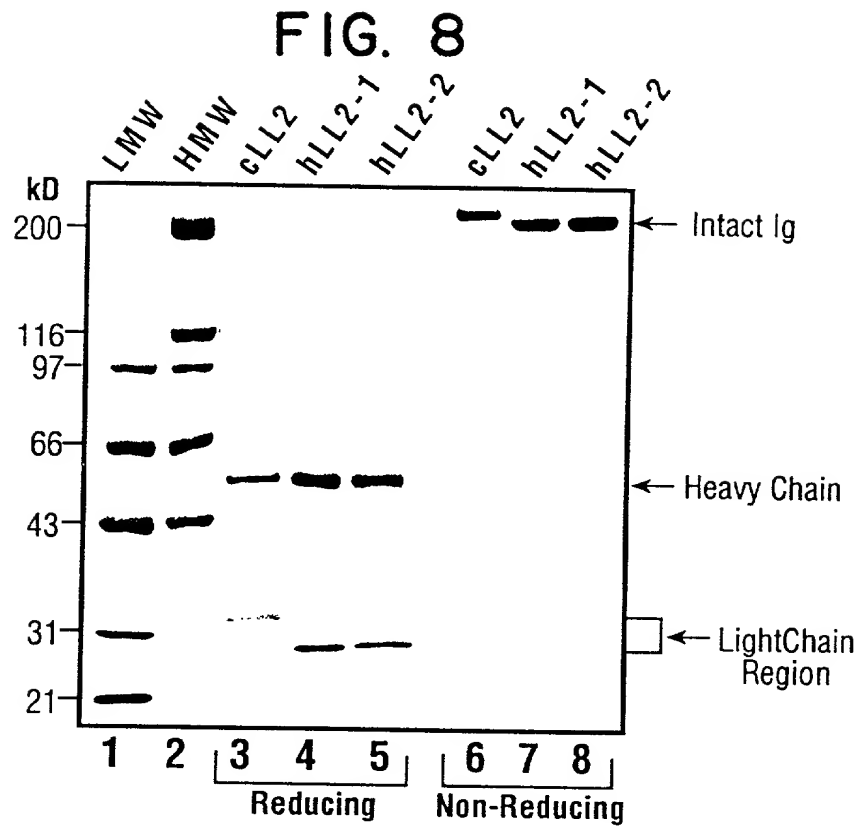
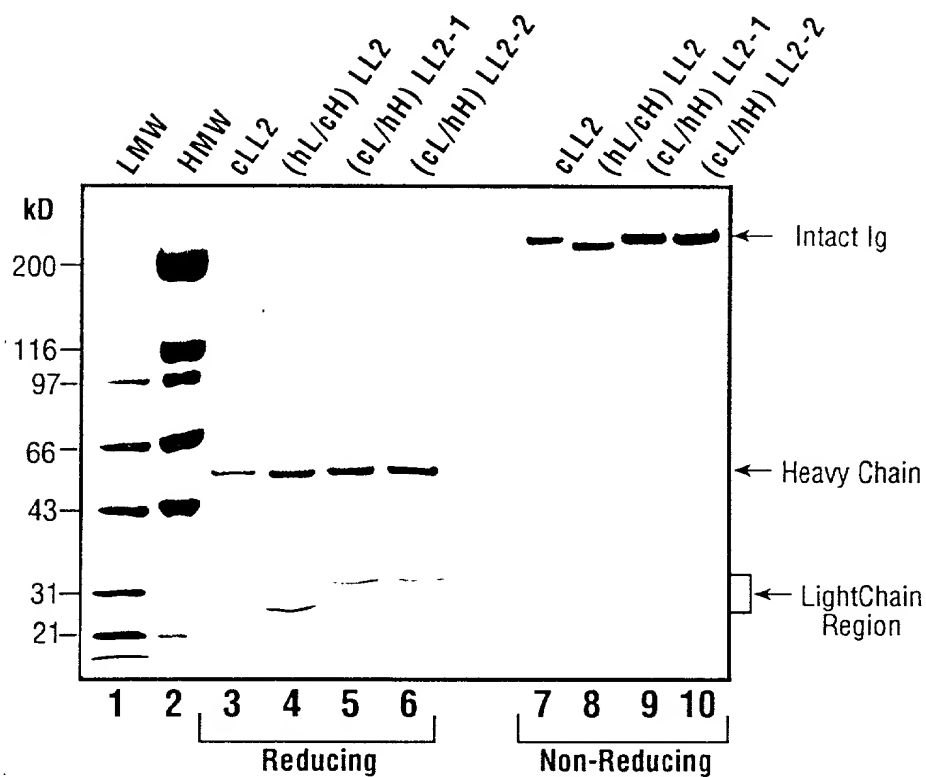


FIG. 9



Title: IMMUNOCONJUGATES AND
HUMANIZED ANTIBODIES SPECIFIC
FOR B-CELL LYMPHOMA AND
LEUKEMIA CELLS

Inventor(s): Shui-on LEUNG et al.

Appl. No.: unassigned

FIG. 10

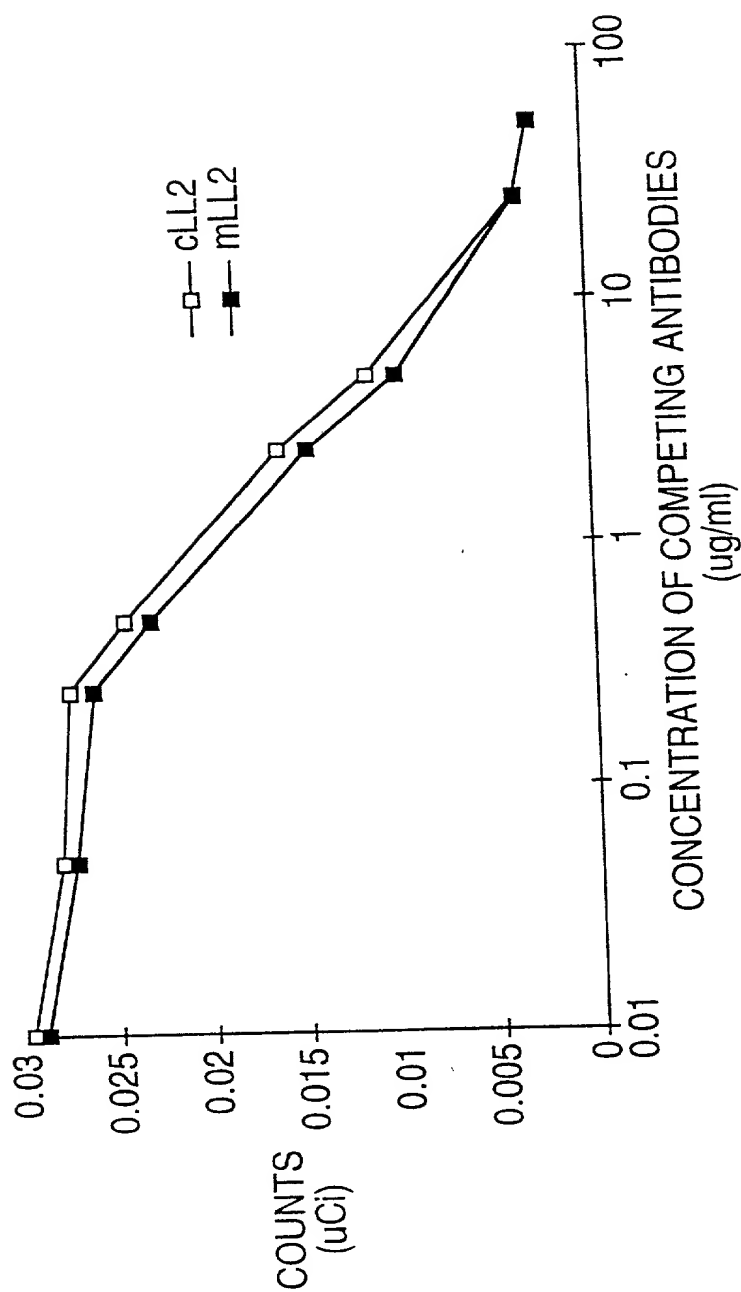


FIG. 11A

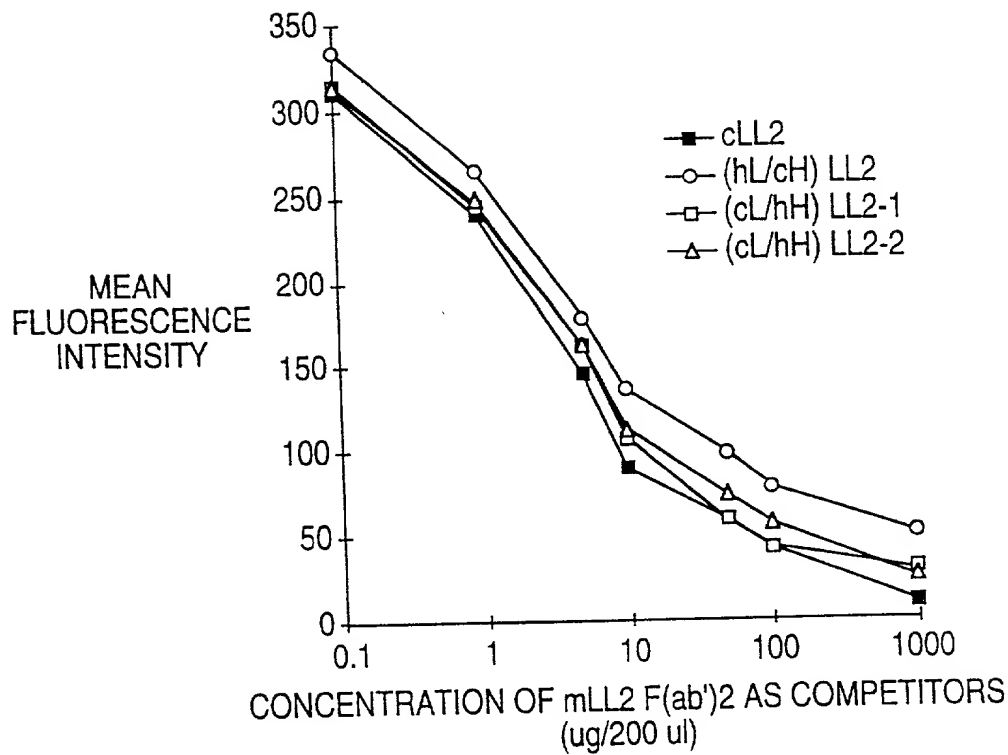


FIG. 11B

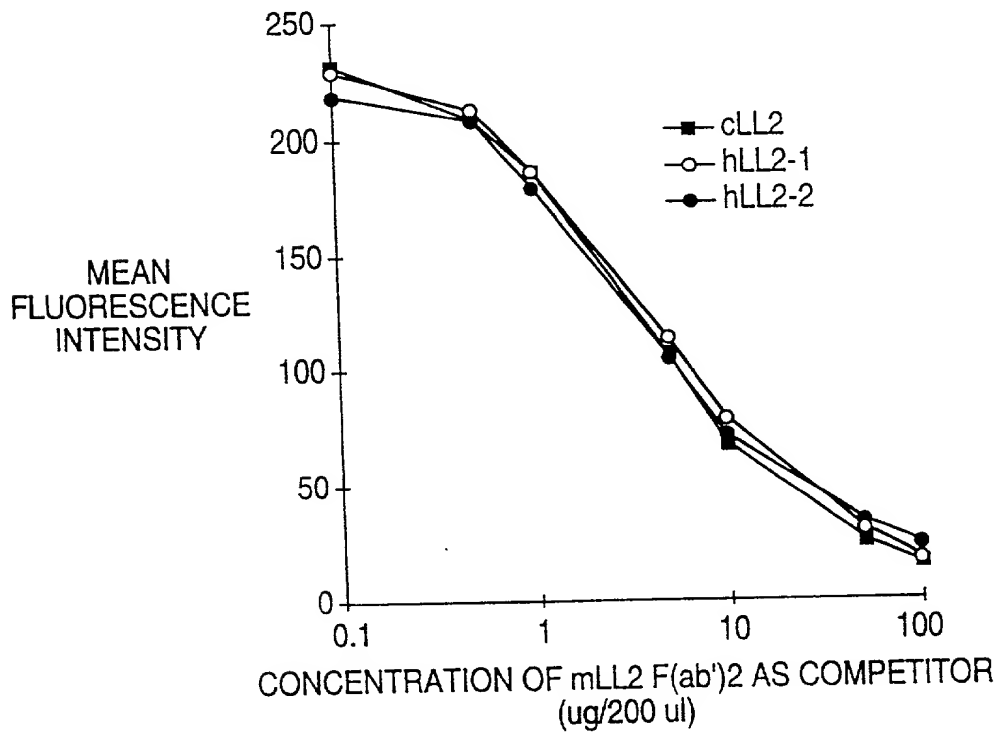


FIG. 12

INTERNALIZATION: c-LL2, h-LL2 vs. m-LL2 IN RAJI CELLS

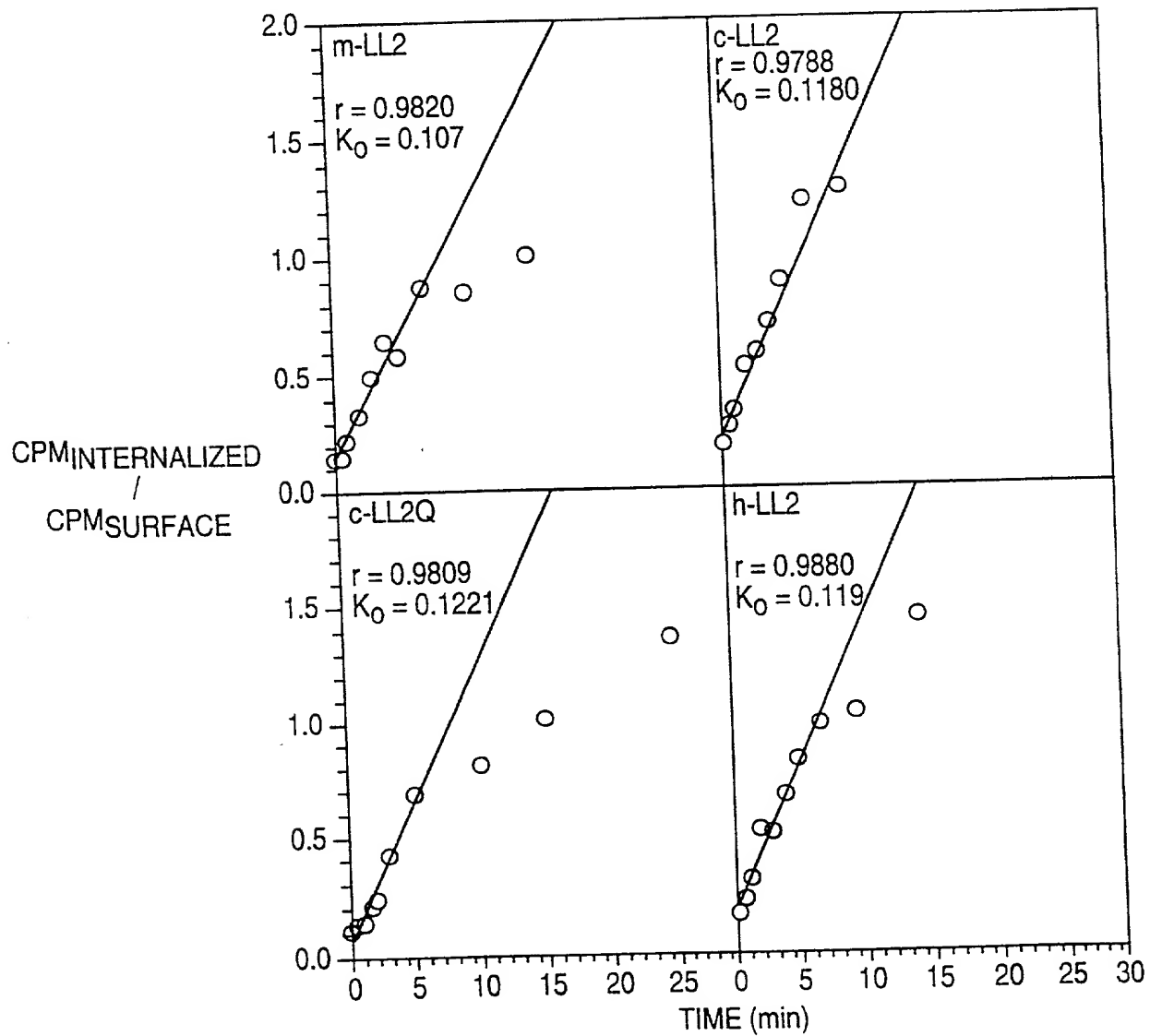


FIG. 13

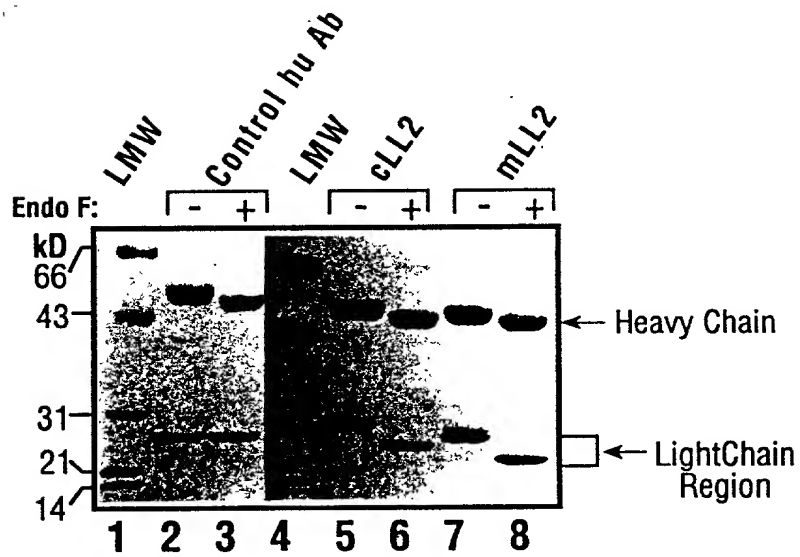


FIG. 14

